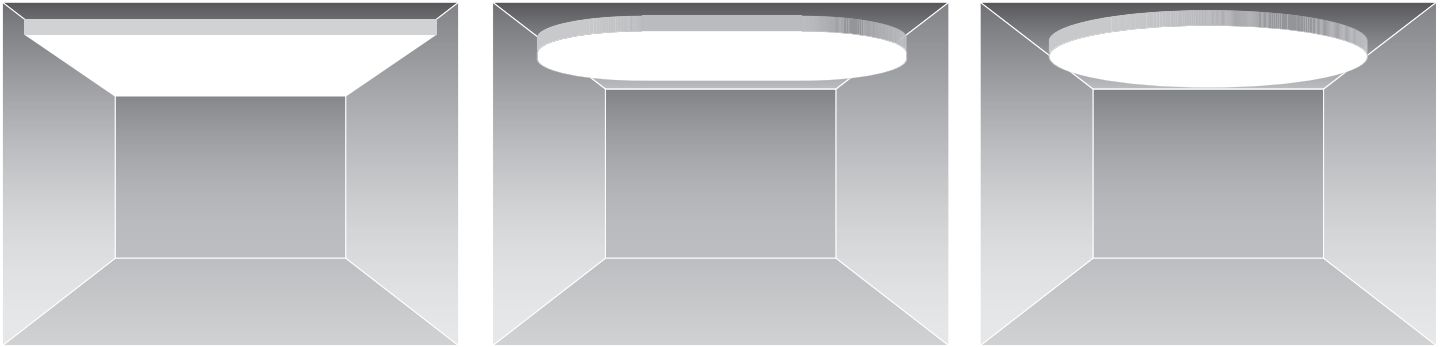




## COOLEGE LUMINOUS CEILINGS SPECIALTY ILLUMINATION SOLUTIONS - SURFACE MOUNT: SPECIFICATIONS

PROJECT		REFERENCE TYPE	
SPECIFIED BY		QUANTITY	
DATE		NOTE	Luminous Ceiling

### SPECIALTY ILLUMINATION SOLUTIONS - SURFACE MOUNT STANDARD CONFIGURATION



Surface Mounted Solutions blend with the ceiling finish to provide a feeling of openness and volume. Available in rectangular and curved shapes.

#### GENERAL

Mounting Type	Surface Mount
Surface Material	Polyester Woven Fabric (coated)
Frame Material	Extruded Aluminum
Light Source	Cooledge TILE Interior or TILE Tunable White (W+RGB option available)
Dust Ply Included	No (available upon request)
Maximum Seamless Dimensions	15.5ft (4.7m) x 161ft (49m) (WxL)
Frame Height	5.3 in (135mm)
Bend Radius (Curves)	Minimum 15" (380mm)

#### SPECIFICATION

- A luminous surface consisting of a lighting system and woven light emitting diffuser mounted to the ceiling surface.
- Cooledge Solutions form a single, uniformly diffuse and seamless light emitting surface; provide a minimum of xx fc (lux) on the horizontal workplane; mount directly to the ceiling surface using an aluminum profile; and are installable in occupied premises, without need for heating devices or water.
- The surface material(s) is of a coated polyester fabric with a fire rating ASTM E 84 Class A /EN:3501-1 Class B or better.
- Light output from the luminous surface is CRI>90; provides flux within 10% of average, and has a color consistency of 2 SDCM over the entire surface. (Single CCT & Tunable White)
- Cooledge Solutions are UL Listed, CE Compliant.

#### FEATURES

- **Low Profile:** Mounts directly to the ceiling surface with a thin profile to create a large scale luminous surface that gives the impression of volume
- **Curves & Rounds:** A bendable profile allows curved shapes, rounded corners and circles with radii down to 15" (380mm)
- **Immersive Illumination:** A large luminous surface delivers a surprising amount of illumination without visual discomfort
- **Adaptable:** Choice of tunable white, dim-to-warm, W+RGB or static color temperature
- **Code Friendly:** Fire-rated polyester fabric and a fully certified lighting system eliminate inspection challenges.

# COOLEDGE LUMINOUS CEILINGS

## SPECIALTY ILLUMINATION SOLUTIONS - SURFACE MOUNT: SPECIFICATIONS

### PHOTOMETRICS<sup>1</sup> (SINGLE CCT & TUNABLE WHITE)

Distribution	Lambertian
Light Output <sup>2</sup> (lm/sqft)	Extra High Flux (XHF): 590 High Flux (HF): 395 Medium Flux (MF): 200 Low Flux (LF): 100
Light Output <sup>2</sup> (lm/m <sup>2</sup> )	Extra High Flux (XHF): 6390 High Flux (HF): 4260 Medium Flux (MF): 2130 Low Flux (LF): 1065
Correlated Color Temperature (CCT)	2200K, 2700K, 3000K, 3500K, 4000K, 5700K, Tunable White 2700K-5700K Dim-to-Warm 3500K-2200K
Color Rendering Index (CRI)	≥ 90
Color Uniformity	2 SDCM (typical)
Lumen Maintenance <sup>3</sup>	L80 = 75,000 hr

Cooledge has conducted extensive testing on the interaction between the light source and the surface materials to deliver the optical and photometric properties of the Solution.

#### TM-30-15 DATA

CCT	2200K	2700K	3000K	3500K	4000K	5700K	TNW*
Rf	88	91	90	89	86	88	90
Rg	99	99	98	98	96	98	100

For more details about Cooledge Solutions color rendering, please see "Light Quality Metrics" at [www.cooledgelighting.com](http://www.cooledgelighting.com)

\* = Tunable White @50% point in the tunable range 2700K - 5700K

<sup>1</sup> Photometric files available from [cooledgelighting.com](http://cooledgelighting.com)  
<sup>2</sup> Based on a 10'x10' (3mx3m) area - refer to Specialty Illumination Solutions Size Factors for other sizes  
<sup>3</sup> Based on LM80 data & TM-21 calculations

### PHOTOMETRICS (W+RGB)

	lm/sqft*	lm/m <sup>2</sup> *
W (3500K)	320	3450
Full W+RGB	640	6900
Red only	95	1020
Green only	260	2800
Blue only	55	600

\*Approximate: actual flux values may vary depending on the size and shape of the Specialty Illumination Solution.

#### WHITE - 3500K

Correlated Color Temperature (CCT)	3500K
CRI (Ra) - White	94
R9	64
Color Uniformity - White (Typical)	3 SDCM
Lumen Maintenance (L70)	50,000 hr

#### WHITE - W+RGB: OTHER CCTS\*

Nominal CCT	Calculated CCT	CRI	R9
2700K	2752K	80	51
3000K	3080K	90	79
3500K	3465K	95	95
4000K	3985K	95	97
5000K	5031K	93	96
5700K	5640K	91	88

**COOLEDGE LUMINOUS CEILINGS**  
**SPECIALTY ILLUMINATION SOLUTIONS - SURFACE MOUNT: SPECIFICATIONS**

**POWER (SINGLE CCT & TUNABLE WHITE)**

Flux Category	Light Output (lm/sqft)	Light Output (lm/m <sup>2</sup> )	CCT	Power (W/sqft)	Power (W/m <sup>2</sup> )
Extra High Flux (XHF)	590	6390	2200K	n/a	n/a
			2700K	7.8	83.4
			3000K	7.1	76.2
			3500K	7.0	75.0
			4000K	7.0	75.0
			5700K	7.0	75.0
High Flux (HF)	395	4260	2200K	5.6	60.4
			2700K	5.2	55.6
			3000K	4.8	52.0
			3500K	4.6	49.6
			4000K	4.6	49.6
			5700K	4.7	50.8
Medium Flux (MF)	200	2130	2200K	2.8	30.2
			2700K	2.6	27.8
			3000K	2.5	26.6
			3500K	2.2	24.2
			4000K	2.4	25.4
			5700K	2.2	24.2
Low Flux (LF)	100	1065	2200K	1.3	14.5
			2700K	1.2	13.3
			3000K	1.2	13.3
			3500K	1.1	12.1
			4000K	1.1	12.1
			5700K	1.1	12.1

**CERTIFICATIONS**



**RoHS**

**INSTALLATION**

Installation of Cooledge Specialty Illumination Solutions must be done by a Cooledge recommended installer.

**WARRANTY**

Refer to Cooledge Terms and Conditions for full warranty details.

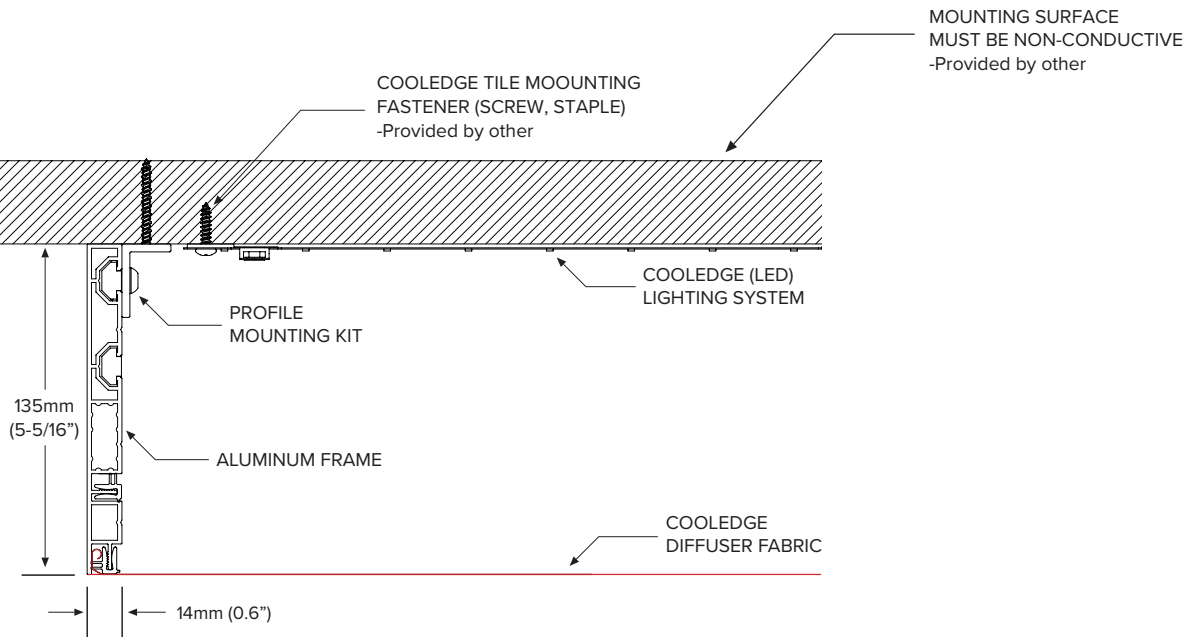
**POWER (W+RGB)**

	W/sqft	W/m <sup>2</sup>
W (3500K)	5.8	62
Full W+RGB	22.5	242
Red only	5.8	62
Green only	5.8	62
Blue only	5.8	62

# COOLEGE LUMINOUS CEILINGS

## SPECIALTY ILLUMINATION SOLUTIONS - SURFACE MOUNT: SPECIFICATIONS

### MECHANICAL DETAILS



**X-Section**

Coolege Specialty Illumination Solutions include the illumination source, frame, mounting hardware, diffuser fabric, and installation of all non-electrical components

### GENERAL

Location	Indoor, dry location only
Operating Temp. Range	0-40°C (32-104°F)
Storage Temp. Range	-40-85°C (-40-185°F)
Relative Humidity	90% max (non-condensing)
Fire Spread	ASTM E84: Class A (FSI = 0–25); EN13501-1: Class B – s1,d0;

# COOLEDGE LUMINOUS CEILINGS

## SPECIALTY ILLUMINATION SOLUTIONS - SURFACE MOUNT: SPECIFICATIONS

### POWER AND CONTROL

Specialty Illumination Solutions include all mechanical, electrical, and lighting components required including power supplies and Cooledge Control Modules selected from the options listed below.

Specifications for the power supplies and Cooledge Control Modules shown below are available in:

- Power and Control Specifications (cUL Listed)
- Power and Control Specifications (CE Compliant)

#### POWER SUPPLIES (54V) - cUL Listed

Order Code	# Controller Channels *	Enclosure
EPSS-092-54V-UL	1	Yes
EPSS-200-54V-UL	2	Yes
EPSS-400-54V-UL	4	Yes

\*Class 2 (max 90W) output

#### COOLEDGE CONTROL MODULES (54V) - Static CCT

Order Code	Protocols
CTR-SCT-DAL/010-48/58V	0-10V, DALI
CTR-SCT-DMX-48/58V	DMX
CTR-SCT-CAS-48/58V	Casambi (wireless)

#### POWER SUPPLIES (54V) - CE Compliant

Order Code	# Controller Channels*	Enclosure
EPSS-092-54V-CE	1	Yes
EPSS-200-54V-CE	2	Yes
EPSS-400-54V-CE	4	Yes

\*Class 2 (max 90W) output

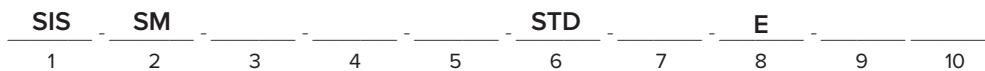
#### COOLEDGE CONTROL MODULES (54V) - TUNABLE WHITE

Order Code	Function	Protocols
CTR-TNW-DAL/010-48/58V	Tunable White	0-10V, DALI
CTR-TNW-DMX-48/58V	Tunable White	DMX
CTR-TNW-CAS-48/58V	Tunable White	Casambi (Wireless)
CTR-DTW-DAL/010-48/58V	Dim-to-Warm	0-10V, DALI
CTR-DTW-DMX-48/58V	Dim-to-Warm	DMX
CTR-DTW-CAS-48/58V	Dim-to-Warm	Casambi (Wireless)

W+RGB solutions require alternate power & controls (DMX & Casambi only). Please contact Cooledge for details.

### HOW TO SPECIFY

**NOTE:** By their nature, Cooledge Specialty Illumination Solutions are custom products. These **Specification Codes** are provided for use as simple references to Cooledge Specialty Illumination Solutions in specifications and/or construction documents. Specification Codes are **NOT** ordering codes. In order to receive quotations or purchase these products from Cooledge, the solution dimensions are required. Cooledge may also request additional information before issuing a quotation or accepting a purchase order.



<b>1 PRODUCT</b> SIS = Specialty Illumination Solution	<b>2 TYPE</b> SU = Suspended SM = Surface Mount FM = Flush Mount	<b>3 SHAPE</b> R = Rectangle C = Curve/Circle	<b>4 FLUX</b> XHF = Extra High Flux HF = High Flux MF = Med Flux LF = Low Flux	<b>5 CCT</b> 27 = 2700K 30 = 3000K 35 = 3500K 40 = 4000K 57 = 5700K TNW = Tunable White DTW = Dim To Warm W+RGB = White + Red Green Blue	<b>6 MOUNTING</b> STD = Standard	<b>7 CONTROL</b> DAL = DALI/0-10V DMX = DMX CAS = Casambi (Wireless)	<b>8 NRC</b> E = 0.2 C = 0.75 (Suspended only)	<b>9 CERTIFICATION</b> U = cUL C = CE	<b>10 TRIM COLOR</b> B = Black W = White
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